

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

[CTGCAGTCTATTGGATGAAGAGTGTACATATTCATATAATTCTTAAAGTAGGCAGAAAT
 TAAAGGGGATGGAAATATATACTTGTACTGCCTTAGATAGTCACCAGGATGTTGTTACAG
 TCTTCGTTTACTGCTTCTGAAGCCTATACTGATAGAATTAATAAAATACTGAGAGAGAGA
 GAGAGGGACAGAGAGAGAGAGAGGGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA
 GAGAGAGAGAGAGAAGAGAAGAAAACAAGGTSAAAGCCATCTGCTTAACCTTATGTCCACAT
 TCTCTCAAGAGCATTGTCTTATTTGTAGAATTATCTATATTGTTAAGAATCATCTCCATT
 GTTAAGATTTTGTGGGCTGGAGATCCAGCTCTGTTGATAAAGTGCTTGCCTAACATGCAT
 GAAGTCCTAGGTTCTATTCCCAAGGCTACATAAAACCTTGTGTTGTGATGAATGCCTGTA
 ATCCCAGTACGCAGCAAGGAGAGACAAGGAGGATCAGAAGCTTAAGGACATCATTTTGTA
 CATAGTGAGTTTGAAGAAAGCTGAGGTTACATGGAACCTCTCTCTCTCAAAAAACAAAAC
 AAAACAAAACAAAACCTTCTACTAATATTCTGGATTCTGTTTGATT'TTAGGATCTCAAG
 AGCATGCTGACGTCATTTATGTGTTTCCATCAGATACAGACAGAGATCATAAACATTTAA
 CTCATTGATTATATGTTGAGAGTTGTCCCTCAAGAACCAATGGCCAAACATCCACTGAGG
 ATACACGGAAGCTTAGAAAATCTCTAATTAAATCCTGACATAATGGAAGTGCTCACAAA
 CCAGCC]AACACCTAATAAAACAGTGGCAAGAGCAACAACCTCGGCATTTTCTACTTTG
AATCCTGCCAACCCCTTTTCTAGCCATACTCTTGCTACTCATAGCATATACTGTGATCC
TAATCATGGGCATTTTGGAAACCTCTCTCTTATCATCATCATCTTTAAGAAACAGAGAG
AAGCTCAAAATGTTACCAACATACTGATT [GCCAACCTGTCCCTCTCTGACATCTTGTTG
 TGTGTCATGTGCATCCCTTTTACGGTCATCTACACTCTGATGGACCAC'TGGGTATTTGGG
 AACACTATGTGTAAACTCACTTCCTACGTGCAAAGTGTCTCAGTTTCTGTGTCCATATTC
 TCCCTTGTGTTGATTGCTATTGAACGATATCAGCTGATTGTGAACCCCGTGGCTGGAAA
 CCCAGAGTAGCTCATGCCTATTGGGGGATCATCTTGATT'TGGCTCAT'TTCTCTGACATTG
 TCTATTCCCTTATTCCTGTCTTACCACCTCACCAATGAGCCCTTTCATAATCTCTCTCTC
 CCTACTGACATCTACACCCACCAGGTAGCTTGTGTGGAGATTTGGCCTTCTAAACTGAAC
 CAATCCTCTTTTCTACATCATTATTTATGCTCCAGTATTTTGTCCCTCTGGGTTTCATT
 CTTATCTGCTACCTGAAGATCGTTCTCTGCCTCCGAAAAAGAAGTAGGCAGGTGGACAGG
 AGAAAGGAAAAATAAGAGCCGTCTCAATGAGAACAAAGAGGGTAAATGTGATGTTGATTTC
 ATCGTAGTGACTTTTGGAGCCTGCTGGTTGCCCTTGAACATTTTCAATGTCATCTTCGAC
 TGGTATCATGAGATGCTGATGAGCTGCCACCACGACCTGGTATTTGTAGTTTGGCACTTG
 ATTGCTATGGTTTCTACTTGCATAAATCCTCTCTTTTATGGATTTCTCAACAAAACTTC
 CAGAAG]GATCTAATGATGCTTATTCACCACTGTTGGTGTGGTGAACCTCAGGAAAGTTA
 TGAAAATATTGCCATGTCTACTATGCACACAGATGAATCCAAGGGATCATTAACACTGGC
 TCACATACCAACAGGCATATAGAACTGGTAAGCAAAATCAAAGCCCTTCTGTTATGAAA
 GAAAGAGAAGAAATAGTATGGAATAGGGCAAGGTGCAGAGGAAGCCAGACTTAAACACAT
 AATATCTTTGGGCCAGTTTGTCTTAAAGTTAAGCATGTCTACTCCATTCAGCCATAGAA
 CACACAGAGATTTATCCCTACCCTTTCTTTTTTCTTTTGAAGAATAATAACTTAAACA
 ACCTAGACATCATTACTGAGGAAGAGAACAATAATGAGAGAGCATACAAGGACAGCAGAG
 ATGTCTGGGGTACAAAATTCACGTTATTCGCTGGAATAGCTAGAAAGTTATTAGTTGTGC
 TGCAG

FIGURE 2A

Gene Sequence Structure

*

846 bp

Sequence Deleted

1047 bp

Size of CDS: 2281 bp

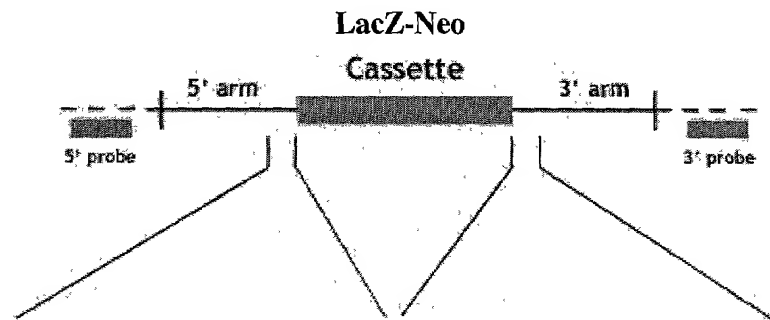
Targeting Vector*
(genomic sequence)

Construct Number: 2762

Arm Length:

5': 5 kb

3': 0.5 kb



— Targeting Vector
 - - - Endogenous Locus

* Not drawn to scale

5' > TTTAGGATCTCAAGAGCATGC
 TGACGTCATTTATGTGTTTCCATC
 AGATACTGACAGAGATCATAAACA
 TTTAACTCATTGATTATATGTTGA
 GAGTTGTCCCTCAAGAACCAATGG
 CCAAACATCCACTGAGGATACACG
 GAAGCTTAGAAAATCTCTAATTAA
 AATCCTGACATAATGGAAGTGCTC
 ACAAAACCAGCC<3'
 (SEQ ID NO:2)

5' > GCCAACCTGTCCCTCTCTGAC
 ATCTTGGTGTGTGTCATGTGCATC
 CCTTTACGGTCATCTACACTCTG
 ATGGACCACTGGGTATTTGGGAAC
 ACTATGTGTAACTCACTTCCTAC
 GTGCAAAGTGTCTCAGTTTCTGTG
 TCCATATTCTCCCTTGTGTTGATT
 GCTATTGAACGATATCAGCTGATT
 GTGAACCCCG<3'
 (SEQ ID NO:3)

FIGURE 2B